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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|--------------------------|------------------------|------------------|
| 10/706,149 | 11/12/2003 | Lakshman S. Withanawasam | Honeywell No. H0004595 | 6076 |
| 7590 | 09/15/2005 | | EXAMINER | |
| Matthew Luxton Honeywell International, Inc. 101 Columbia Road P.O. Box 2245 Morristown, NJ 07962-2245 | | | AURORA, REENA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2862 | |
| DATE MAILED: 09/15/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,149

Applicant(s)

WITHANAWASAM ET AL.

Examiner

Reena Aurora

Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 18 is/are pending in the application.
- 4a) Of the above claim(s) 12 - 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 11 and 16 - 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/12/03, 07/01/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Applicant's election with traverse of invention I (claims 1 – 11 and 16 - 18) in the reply filed on 07/01/05 is acknowledged. The traversal is on the ground(s) that detailed description and figures calls for the semiconductor subsurface to have an angular sensor and a linear sensor, meaning the angular and linear sensors are formed on same substrate, rather than being separate devices simply mounted on the substrate. In this configuration, the angular and linear sensors are subject to similar manufacturing conditions. This is not found persuasive because in the instant case the sensor as claimed can be made by a materially different process such as instead of forming on a common substrate this particular sensor can be mounted on the substrate, therefore the sensor does not require the particular steps of making of the sensor as claimed by the applicant.

The requirement is still deemed proper and is therefore made FINAL.

Specification

The disclosure is objected to because of the following informalities: On page, applicant should update that the application No. 10/002,454 is now US Patent No. 6,707,293.

Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 – 9, 11 and 16 - 18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2 of U.S. Patent No. 6,707,293 (Wan et al.) in view of 6,212,783 (Ott et al.).

As to claims 1 and 16 - 18, Wan et al. (hereinafter Wan) discloses all the elements of claim 1 except a semiconductor substrate having both sensors. Ott et al. (hereinafter Ott) discloses an arrangement for contactless determination of an angular position of a rotatable element including two sensor elements (IC1 and IC2) located on a substrate (16, fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Wan with the teachings of Ott such that providing both sensors on a semiconductor surface in order to reduce the size of the device.

Claims 2 and 4 of the application corresponds to claim 2 of US 6,707,293.

Claim 3 of the application corresponds to claims 4 and 10 of US 6,707,293.

Claim 5, Wan discloses that the linear sensor is coaxially located with respect to the angular sensor (claim 12). Wan fails to show that both the sensors are located on the semiconductor substrate. Ott discloses an arrangement for contactless determination of an angular position of a rotatable element including two sensor elements (IC1 and IC2) located on a substrate (16, fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Wan with the teachings of Ott such that providing both sensors on a semiconductor surface in order to reduce the size of the device.

Claim 6, of the application corresponds to claims 13 - 15 of US 6,707,293.

Claim 7 of the application corresponds to claims 5 and 6 of US 6,707,293.

Claim 8 of the application corresponds to claim 7 of US 6,707,293.

Claim 9 of the application corresponds to claim 12 of US 6,707,293.

Claim 11, of the application corresponds to claims 1, 2, 12, 13 and 27 of US 6,707,293.

Claims 10, is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2 of U.S. Patent No. 6,707,293 (Wan et al.) in view of Applicant admitted prior art (AAPA).

Claim 10, Wan fails to show that the linear sensor and the angular sensor are magnetoresistive sensors. AAPA discloses that it is well known to use magnetoresistive sensors as linear sensor (page 2, line 16) and angular sensors (page 3, line 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Wan with the teachings of AAPA


Art Unit: 2862

such that providing magnetoresistive sensors as linear and angular sensor would provide similar results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Reena Aurora
Examiner